

Date: Monday, 11/08/2008 10:09:53 AM
User: Linda Lacelle

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	350 SKIDTUBE ASSEMBLY RH
Job Number :	41095	Part Number :	D350636012
Estimate Number :	10265	Drawing Number :	D2750 UNDER REVIEW
P.O. Number :		Project Number :	N/A
This Issue :	11/08/2008 S.O. No. :	Drawing Revision :	
Prsht Rev. :	NC	Material :	
First Issue :	11/08/2008 Type : SKIDTUBES	Due Date :	30/08/2008
Previous Run :	41059	Qty:	1 Um: Each
Written By :			

03.08.12
UPDATE PER
DSI 9413

Checked & Approved By : JUD 08.8.11

Comment :
Est Rev:I 02.09.25 Rearranged procedure steps KJ
Est Rev:J 06-03-29 As per Rev D EC
Est Rev:K 06-07.13 As per dsi9343 EC
Est Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM
Verified By:EC
Est Rev:M 08-04-22 update steps 4,13 DD verified by:EC

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	DC	DOCUMENT CONTROL
-----	----	------------------



JUD 08.8.26



Comment: DOCUMENT CONTROL
Photocopy blue file and type labels per PPP D350-636-012 CHG 004

5 28/08/03

2.0	D26003BENT	Extrusion Bent
-----	------------	----------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D2600-3-Bent	Extrusion (Bent)	41122 SL 8-8-26

3.0	D2744	Cap
-----	-------	-----



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Cap

Batch: 39242 SL 8-8-26

4.0	SKIDTUBES 1	SKIDTUBESS RESOURCE 1
-----	-------------	-----------------------



Comment: LANDING GEAR RESOURCE 1

1- Mark cut line on aft end of D2600-3-Bent using Jig DT 8150. Cut to length as per Dwg D2750. Deburr end

2-Drill pilot holes as per Dwg D2750 sheet 3 (D2750-1 details).Drill using drill Jig DT8150 & DT8863 .

SL 8-8-26

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 11/08/2008 10:09:54 AM
User: Linda Lacelle

Process Sheet

Customer: CU-PAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 41095

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

3- Mark fwd end for cutting using Drill Jig DT 8150 & DT8863 and cut as per dwg D2750.

4-Drill pilot holes for Detail G using DT8329

5-Open up holes for Detail B to 0.375" (4 holes per side) blade fitting location holes to 0.500" (total of 5 holes per side) as per dwg D2750. Open holes for ground handling and detail E to 0.500" (8 holes per side)

6-Drill pilot holes for wearplates as per Dwg D2750 using DT8108

****Make sure that wearplate holes are on bottom of tube*****

Open 4 aft wearplate holes to 0.250". Open remaining wearplate holes to 0.297".

7-Open up holes of Detail A to 0.297" (total of 2 holes per side)

9-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left from bending as per QSI 004
A/R Aluminum Rod m108096/m107877 SL 8-8-26 SE 08-08-26

10-Grind welds flush as per Dwg D2750

5.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

08-08-26



6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08-08-26



7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

SL 8-8-26



8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

DP



8-9-3

9.0

D2739

350 I Beam



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Web

Batch: 41127

ET 08-09-04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 11/08/2008 10:09:54 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 41095

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

10.0

D34901

Cross Bolt Spacer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Crossbolt spacer

Batch: B39584 M 8-9-5

11.0

D34903

Cross Bolt Spacer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Crossbolt spacer

Batch: B41136 (4) M 8-9-5

12.0

D2743

Crossbolt Spacer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Crossbolt Spacer

Batch: B410725 M 8-9-5 (8)

13.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open up holes of Detail E and ground handling to 0.625" (total of 8 holes per side)
as per dwg D2750.

2-Open up holes of Detail B to 0.750" (total of 4 holes per side)
as per dwg D2750.

3-Open float holes to .500" (4 per Side)

4-Chamfer holes of Detail B, E, ground handling and float holes per dwg D2750 (welding instructions on sheet 4)

5-Deburr and blow out all chips from inside of tube

6-Prepare tube for welding, remove alodine as required.

7-Bond web D2739 in place as per QSI 015

A/R Sikaflex-291

batch: 106801

exp. date: 8-10-01

RT 08-01-04

8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004
(welding instructions on sheet 4)

Jb8-9-3

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 11/08/2008 10:09:54 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 41095

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

A/R Aluminum Rod batch: *M108708 DE 08/09/08*

9-Grind welds flush as per Dwg D2750

10-Spot face ground handling holes section P-P (total of 4 places per side) as per dwg D2750

11-Debur holes

*-ANW
8-9-8*

14.0

QC10

VISUAL INSPECTION OF GROUND WELDS



(P10) =>

Comment: VISUAL INSPECTION OF GROUND WELDS

0809.19 ①

15.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

0809.19 ①

16.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



(1X)

Comment: HAND FINISHING RESOURCE #1

Pressure wash as per QSI 005

M-1 08/09/19

17.0

POWDER COATING

POWDER COATING



(1X)

Comment: POWDER COATING

Powder Coat Gloss White (Ref. 4.3.5.1) as per Dart QSI 005 4.3

START TIME: *10:50*

OVEN TEMPERATURE: *320 05*

FINISH TIME: *11:20*

M-1 08/09/19

18.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



①

Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Inspect for foreign object per QSI 024

FL 08/09/22

19.0

ALS41032225

Insert



Comment: Qty.: 42.0000 Each(s)/Unit Total: 42.0000 Each(s)

Insert

Batch: *M100489*

FL 08/09/22 ①

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D350-636-012 PAR #: N/A Fault Category: Pod / Skid tube NCR: (Yes) No DQA: D Date: 08/09/26
 QA: N/C Closed: D Date: 08/09/26

NCR: <u>41095</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
8/9/8	# 13.10	during inspection it was found that All 8 spot faces were Done too Deep AND off to one side	<i>[Signature]</i>	Re weld all 8 spot faces <u>APM/08708</u> per QSZ004	<u>BE</u> <u>08/09/17</u>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
			<i>[Signature]</i>	Grind welds flush and re spot face as per Dwg.	<u>ALM</u> <u>8-9-18</u>	<u>08-09-19</u>	<i>[Signature]</i>	<i>[Signature]</i>
		E.C. operator / Human error also the Pilot on the spot face was too small in dia.	<i>[Signature]</i>	- Train all dept employee's on how to spot face & get a new pilot	<i>[Signature]</i> <u>8-9-18</u>	<u>08-09-19</u>	<i>[Signature]</i>	<i>[Signature]</i>

NOTE: Date & initial all entries

Date: Monday, 11/08/2008 10:09:54 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 41095

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

20.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install inserts as per dwg D2750

FL 08/09/22 (C)

21.0

D2745

Bushing



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Bushing

Batch: B36230

FL

22.0

D353525

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch: B39716

FL

23.0

D353625

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: B40729

FL

24.0

D35371

Wearpad



Comment: Qty.: 3.0000 Each(s)/Unit Total : 3.0000 Each(s)

WEARPAD

Batch: B38941

FL

25.0

D37911

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Wearplate

Batch: B39694

FL

26.0

D37931

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Wearshoe

Batch: B40551

FL 08/09/22 (C)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 11/08/2008 10:09:54 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 41095

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

27.0

D37933

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
Wearshoe *B40552*

FL

28.0

D37941

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
Gasket *B40553*

FL

29.0

D37943

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
Gasket *B39713*

FL

30.0

D36721

Phenolic Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)
Phenolic Washer *B39275*

FL

31.0

AN526C1032R10

Screw



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)
Screw *m108062*

FL

32.0

AN526C1032R18

Screw



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)
Screw *m108079*

FL

33.0

D36311

Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)
WASHER
Batch: *B38139 (x7) B41141 (x1)*

FL

34.0

D3488042

Blade Fitting Assembly, RH



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
Blade Fitting, RH
Batch: *B38787*

FL 08/09/22 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 11/08/2008 10:09:54 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 41095

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

35.0

D3492041

Plug Assembly



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

PLUG ASSEMBLY

Batch: 041137

FL

36.0

D3492043

Plug Assembly



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

PLUG ASSEMBLY

Batch: 041090

FL

37.0

AN3C5A

Bolt



Comment: Qty.: 34.0000 Each(s)/Unit Total : 34.0000 Each(s)

Bolt

Batch: M108744

FL

38.0

AN3C6A

BOLT



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

Bolt

Batch: M105300

FL

39.0

AN6C44A

BOLT



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

BOLT

Batch: M109091

FL

40.0

AN8C35A

BOLT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

BOLT

Batch: M106896

FL

41.0

AN960C10L

washer



Comment: Qty.: 38.0000 Each(s)/Unit Total : 38.0000 Each(s)

washer

Batch: M108928

FL 08/09/22 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 11/08/2008 10:09:54 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 41095

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

42.0

AN960C816L

WASHER



1 at 06.08.12



Comment: Qty.: 1 20000 Each(s)/Unit Total: 20000 Each(s)

WASHER

Batch: m108928

FL

43.0

MS210436

NUT



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

NUT

Batch: m108857

FL

44.0

MS21083C8

NUT



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

NUT

Batch: m108880

FL

45.0

NAS1515H3L

WASHER



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

WASHER

Batch: m108964

FL

46.0

NAS1515H8L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

WASHER

Batch:

NOT REQ'D

at 06.08.12

47.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3"

batch: m107912

3-Install blade fitting D3488-042, wearshoes and ground handling hardware as per dwg D2750

SIKA FLEX 241

BATCH: m108801

EXP DATE: 08/10

FL 08/09/22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 11/08/2008 10:09:54 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 41095

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

4-Coat all exposed fasteners with "LPS Procyon"

batch: M104251

FL 08/09/22 (1)

48.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 08/09/22 (2)

49.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

50.0

D2741

Blade, 350 Skidtube



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Blade

Batch: 40724

PV

51.0

AN960C816L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Washer

Batch: M107520

PV

52.0

MS21083C8

NUT



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Nut

Batch: M108800

PV

53.0

AN8C21A

BOLT



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Bolt

Batch: M109092

PV

54.0

NAS1515H8L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: M107881

PV 8/9/23 (1)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 11/08/2008 10:09:54 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 41095

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

55.0

D34931

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: 90829

56.0

D35321

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

spacer

Batch: 38594

57.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

58.0

PACKAGING 1

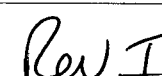
PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Package as per PPP D350-636-012

CHG 004 01.01.12



59.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



41095

08/09/24

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>PH</i>	DRAWN BY <i>CB</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2750	REV. E SHEET 1 OF 5
DATE 07.05.17		TITLE 350 SKIDTUBE ASSEMBLY SCALE NTS	
REV	DATE	DESCRIPTION	
A	98.04.16	NEW ISSUE	
B	98.09.01	CHANGE MS24694-S293 TO AN8-16A	
C	98.11.18	ADD D2750-3 / D2750-4; INCORPORATE D2738 AND D2740	
D	06.01.05	ADD HOLES AND SPACERS FOR APICAL FLOATS INCORPORATE DEO 9133 / 9157	
E	07.05.17	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS; CHANGE INSERTS; ADD D3631-1; REMOVE QTY(38) NAS1515H3L; REMOVE QTY(10) NAS1515H8L; REMOVE D2741, QTY(2) AN960C816; REMOVE QTY(2) MS21083C8	

RELEASED
07.08.02

Qty -041	Qty -042	Qty -043	Qty -044	Part Number	Description
X				D2750-041	SKIDTUBE ASSEMBLY, LH
	X			D2750-042	SKIDTUBE ASSEMBLY, RH
		X		D2750-043	SKIDTUBE ASSEMBLY, LH
			X	D2750-044	SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-13	WEARSHOE
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3535-35	WEARSHOE
1	1	1	1	D3536-13	GASKET
1	1	1	1	D3536-25	GASKET
1	1	1	1	D3536-35	GASKET
5	5	5	5	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
42	42	42	42	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
38	38	38	38	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN3C7A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
46	46	46	46	AN960C10L	WASHER
2	2	2	2	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER
2	2	2	2	NAS1515H8L	WASHER

PH 06.07.12
UNDER REVIEW
08.06.27
UPDATE
PER
051 9419

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 41095

COPYRIGHT © 1998 BY DART AEROSPACE USA, INC.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.



DESIGN <i>PH</i>	DRAWN BY <i>CB</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2750	REV. E SHEET 2 OF 5
DATE 07.05.17		TITLE 350 SKIDTUBE ASSEMBLY	SCALE NTS

GENERAL NOTES:

RELEASED
07-08-02 *[Signature]*

1. ALL DIMENSIONS ARE IN INCHES.
2. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
3. MAKE FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
4. DAMAGE TOLERANCE ON BENDING:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 12 INCHES ABOVE THE GROUND. NO GOUGING IS ACCEPTABLE IN THE FLAT PORTION OF THE TUBE. GOUGES UP TO 0.020 ARE ACCEPTABLE IN THE BENT PORTION OF THE TUBE. TUBE O.D. SHOULD BE 3.150 ± 0.010 IN THE FLAT PORTION OF THE TUBE. TUBE O.D. SHOULD BE 3.15 ± 0.030 IN THE BENT PORTION OF THE TUBE.
5. ALL HOLES DRILLED ON CENTERLINES EXCEPT THOSE NOTED BY SECTIONS C-C, D-D AND F-F.
6. WELDING TO BE DONE PER DART QSI 004.
7. FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 ksi
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
8. FINISH:
ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
9. INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED IN D2750-1/-2/-3/-4 WELDING DETAIL ON PAGE 4 AND 5. DRILL 'F' SIZE HOLES ($\emptyset 0.297$) FOR WEARSHOE INSERTS.
10. D3488-041 (OR D3488-042) BLADE FITTING AND AN3C5A/AN3C7A WEARSHOE BOLTS TO BE INSTALLED USING SIKAFLEX-241 (OR EQUIVALENT) SEALANT.
11. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH NO. LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

SHOP COPY
RETURN TO
ENGINEERING

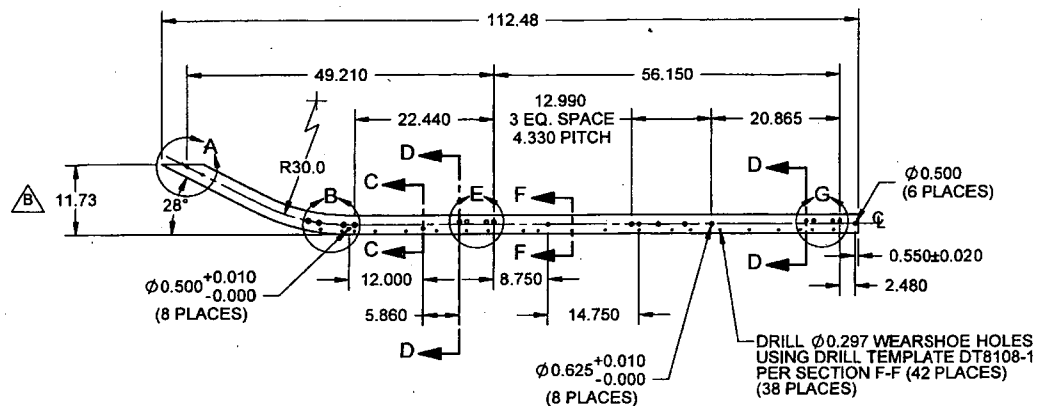
UNCONTROLLED COPY
SUBJECT TO AMENDMENT

WITHOUT NOTICE
WORK ORDER

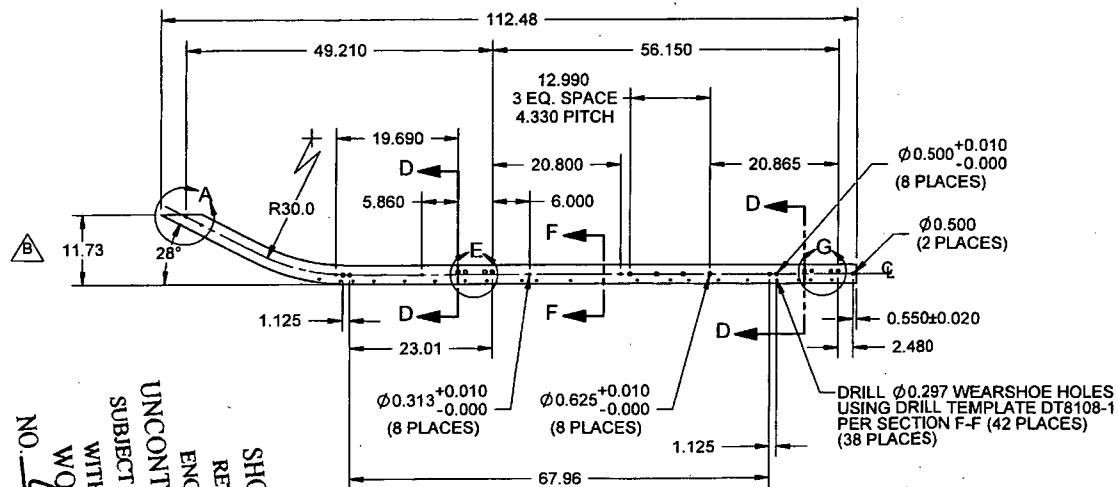
Ref
06-08-12
UNDER REVIEW
08-08-12
UPDATE
PER
051 9413

COPYRIGHT © 1998 BY DART AEROSPACE USA, INC.

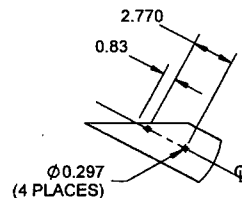
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.



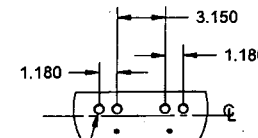
D2750-1 LH SKIDTUBE (SHOWN)
D2750-2 RH SKIDTUBE (OPPOSITE)



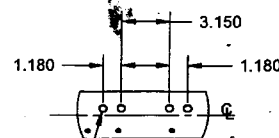
D2750-3 LH SKIDTUBE (SHOWN)
D2750-4 RH SKIDTUBE (OPPOSITE)



DETAIL A
SCALE 1:8

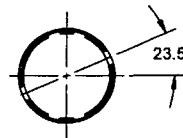


DETAIL E
SCALE 1:8

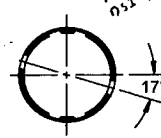


DETAIL G
SCALE 1:8

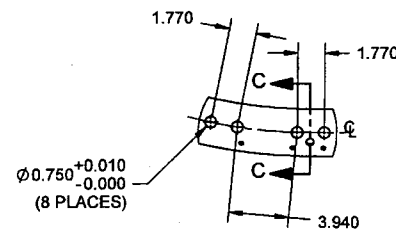
PH 03.03.12
UNDER REVIEW
01.05.27
UPDATE
PER
NSI 9413



SECTION C-C
SCALE 1:4

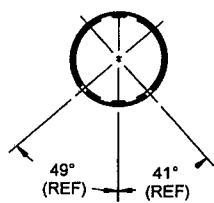


SECTION D-D
SCALE 1:4



DETAIL B
SCALE 1:8
(ALL DIMENSIONS ARE STRAIGHT LINE DIMENSIONS)

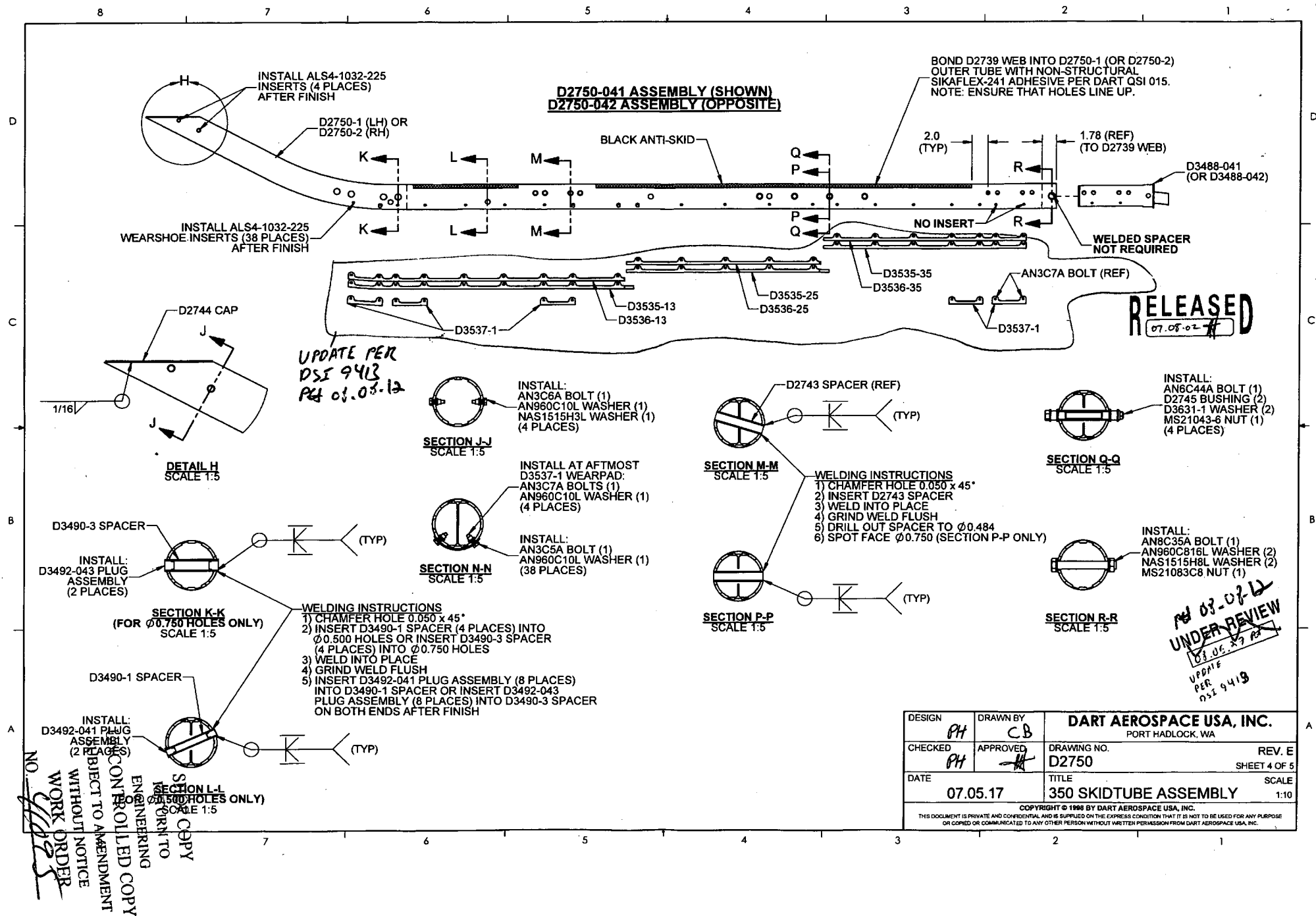
RELEASED
07.05.17



SECTION F-F
SCALE 1:4

NO. 41025
WORK ORDER
SUBJECT TO AMENDMENT
WITHOUT NOTICE
UNCONTROLLED COPY
ENGINEERING
RETURN TO
SHOP COPY

DESIGN PH	DRAWN BY CB	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED PH	APPROVED PH	DRAWING NO. D2750	REV. E SHEET 3 OF 5
DATE 07.05.17		TITLE 350 SKIDTUBE ASSEMBLY	SCALE 1:20
COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.			



8

7

6

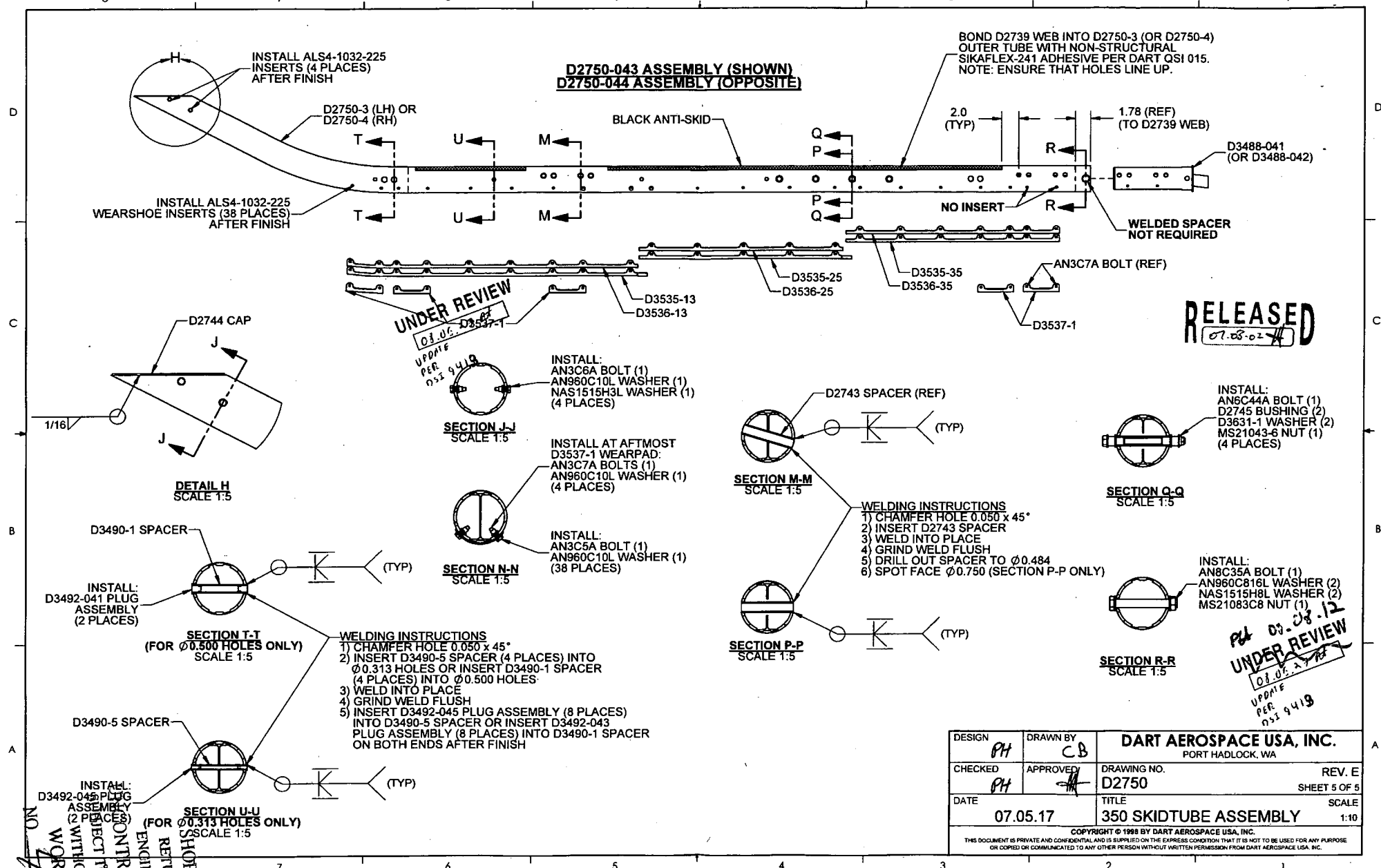
5

4

3

2

1



DART SERVICE INSTRUCTION

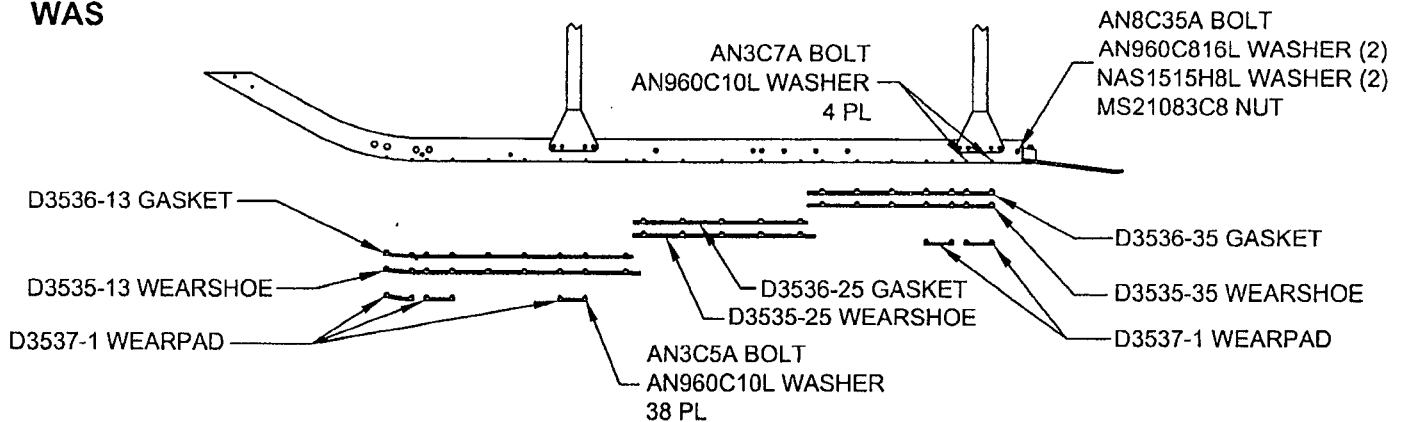
TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-636 REV E

REF FAA STC: SR00646SE

REF CANADIAN STC: SH99-7

THE WEARPLATES ON D350-636-011/-012/-013/-014 SKIDTUBES AT CHG 004 (AND LATER) HAVE BEEN MODIFIED AS SHOWN IN FIGURE 1 BELOW TO ELIMINATE THE POSSIBILITY OF INTERFERENCE BETWEEN THE WEARPLATES AND CROSSTUBE SADDLES AT INSTALLATION. THERE IS NEGLIGIBLE WEIGHT CHANGE ASSOCIATED WITH THIS MODIFICATION.

WAS



NOW

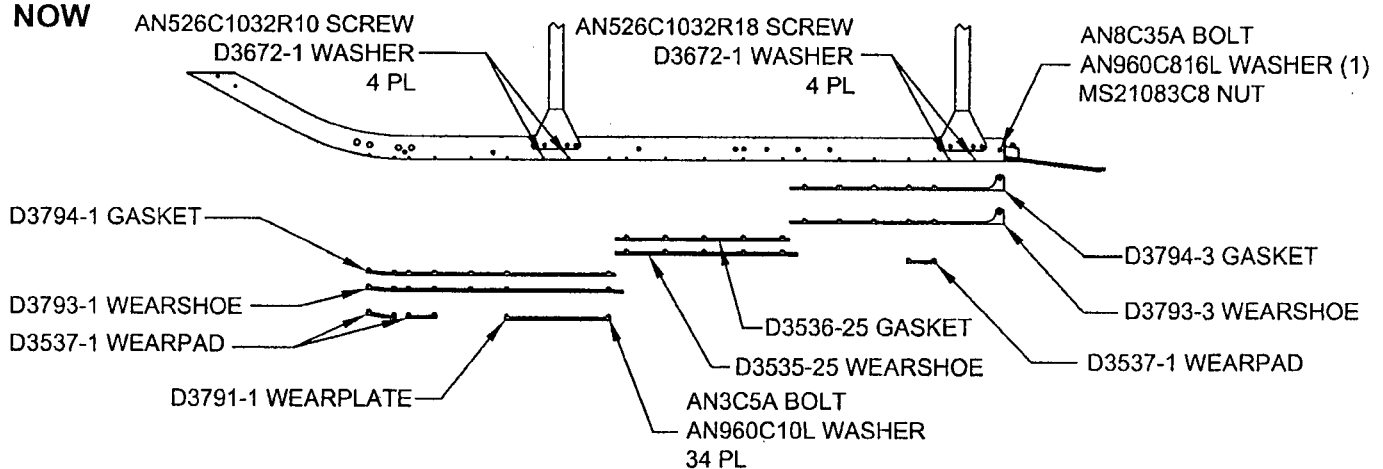


FIGURE 1 - WEARPLATE MODIFICATION

(AN526C1032RXX SCREW LOCATIONS NO LONGER USED TO MOUNT WEARSHOES)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 41095

A	NEW ISSUE	PH	08.05.14
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN	PH		
CHECKED	B	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9413	SHEET 1 OF 3
APPROVED	H	TITLE	SCALE
DE APPR.	H	WEARSHOE MODIFICATION	NTS
DATE	08.05.14	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

FOR D350-636-011/-012/-013/-014 SKIDTUBES AT CHG 004, AMEND PARTS LIST OF IIN-D350-636 SECTION 5 AS FOLLOWS:

REMOVE:

Item	Qty -011	Qty -012	Qty -013	Qty -014	Part Number	Description
	X				D350-636-011	SKIDTUBE INSTALLATION, LH, STD AERAZUR/APICAL CYLINDRICAL FLOAT COMPATIBLE
		X			D350-636-012	SKIDTUBE INSTALLATION, RH, STD AERAZUR/APICAL CYLINDRICAL FLOAT COMPATIBLE
			X		D350-636-013	SKIDTUBE INSTALLATION, LH AIRCRUISER/ APICAL TRI-BAG FLOAT COMPATIBLE
				X	D350-636-014	SKIDTUBE INSTALLATION, RH AIRCRUISER/ APICAL TRI-BAG FLOAT COMPATIBLE
*6A	1	1	1	1	AN960C816L	WASHER
6B	2	2	2	2	NAS1515H8L	WASHER
*22	2	2	2	2	D3537-1	WEARPAD
23A	1	1	1	1	D3535-13	WEARSHOE
23B	1	1	1	1	D3536-13	GASKET
25A	1	1	1	1	D3535-35	WEARSHOE
25B	1	1	1	1	D3536-35	GASKET
*26A	4	4	4	4	AN3C5A	BOLT
*26B	4	4	4	4	AN3C7A	BOLT
*27	8	8	8	8	AN960C10L	WASHER

*SUBTRACT FROM TOTAL QUANTITY OF PARTS INDICATED IN INSTALLATION INSTRUCTIONS IIN-D350-636

ADD:

Qty -011	Qty -012	Qty -013	Qty -014	Part Number	Description
X				D350-636-011	SKIDTUBE INSTALLATION, LH, STD AERAZUR/APICAL CYLINDRICAL FLOAT COMPATIBLE
	X			D350-636-012	SKIDTUBE INSTALLATION, RH, STD AERAZUR/APICAL CYLINDRICAL FLOAT COMPATIBLE
		X		D350-636-013	SKIDTUBE INSTALLATION, LH AIRCRUISER/ APICAL TRI-BAG FLOAT COMPATIBLE
			X	D350-636-014	SKIDTUBE INSTALLATION, RH AIRCRUISER/ APICAL TRI-BAG FLOAT COMPATIBLE
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
8	8	8	8	D3672-1	WASHER
4	4	4	4	AN526C1032R10	SCREW
4	4	4	4	AN526C1032R18	SCREW

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 41095

DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	PH	PORT HADLOCK, WA	
CHECKED	B	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9413	SHEET 2 OF 3
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	WEARSHOE MODIFICATION	NTS
DATE	08.05.14	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

TO IMPROVE THE INSTALLATION OF D350-636-011/-012/-013/-014 SKIDTUBES EQUIPPED WITH STAINLESS WEARPLATES/WEARPADS AND GASKETS (CHG 003) ONTO THE CROSSTUBES, THE FOLLOWING DSI 9413-011 WEARSHOE KIT CAN BE PROCURED FROM DART:

Qty -011	Part Number	Description
X	DSI 9413-011	WEARSHOE MODIFICATION KIT
1	D3791-1	WEARPLATE
1	D3793-1	WEARSHOE
1	D3793-3	WEARSHOE
1	D3794-1	GASKET
1	D3794-3	GASKET
8	D3672-1	WASHER
4	AN526C1032R10	SCREW
4	AN526C1032R18	SCREW

TO INSTALL THE DSI 9413-011 KIT, REMOVE THE EXISTING WEARSHOES/GASKETS UNDER THE FWD/AFT SADDLES AND INSTALL NEW WEARSHOES/GASKETS AS SHOWN IN FIGURE 1. PLUG UNUSED HOLES WITH AN526C1032RXX SCREWS AND D3672-1 WASHERS. INSTALL SCREWS WITH SIKAFLEX -241/-291 OR PROSEAL 890 OR MIL-S-8802 CLASS 'B2' SEALANT AS SHOWN IN FIGURE 1. NOTE: SOME OF THE PREVIOUSLY INSTALLED HARDWARE IS NO LONGER REQUIRED.

THE FOLLOWING D350-636-045 REPLACEMENT WEARPLATE KIT WILL BE AVAILABLE FOR D350-636-011/-012/-013/-014 SKIDTUBES AT CHG 004 OR LATER:

Qty -011	Part Number	Description
X	D350-636-045	WEARSHOE KIT
3	D3537-1	WEARPAD
1	D3535-25	WEARSHOE
1	D3536-25	GASKET
1	D3791-1	WEARPLATE
1	D3793-1	WEARSHOE
1	D3793-3	WEARSHOE
1	D3794-1	GASKET
1	D3794-3	GASKET
34	AN3C5A	BOLT
34	AN960C10L	WASHER

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 41095

DESIGN	PH	DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN	PH		
CHECKED	PH	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9413	SHEET 3 OF 3
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	WEARSHOE MODIFICATION	NTS
DATE	08.05.14	<small>COPYRIGHT © 2008 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

NO. 168

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barday Elliott
Job number: 41099
Part number: D350 636 012
Description: 350 Skid
Welding Process: Tig[☒] Mig[]
Base material: Aluminium
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Pat Duml. Date of Test Coupon 08-08-21
Welder Barday Elliott Date of Test Coupon 08-08-21

The above named individual is qualified in accordance with AWS D17.1.2001 to weld